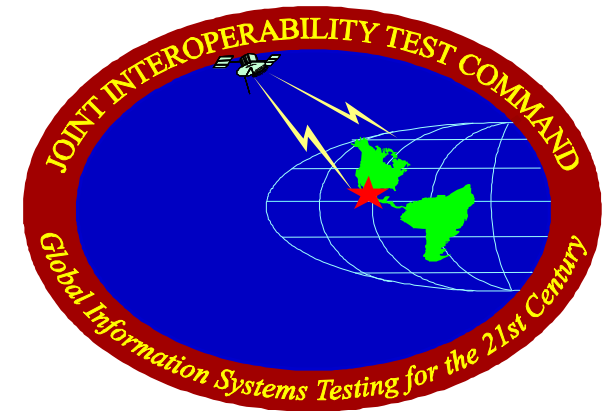## ADDITIONAL INFORMATION

For more information about JITC Software Interoperability testing, its capabilities and procedures, please contact the following JITC representative:

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SOFTWARE INTEROPERABILITY AND CONFORMANCE TESTING

Joint Interoperability Test Command

Joint Interoperability Test Command
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INTRODUCTION

The Joint Interoperability Test Command (JITC) has extensive experience in software testing and development of software testing tools for Information Management and C^{4}I systems. JITC has performed software systems acceptance testing of the Global Transportation Network (GTN) System, the Reserve Component Automation System (RCAS), and is currently working on the Global Command and Control System (GCCS) and the Defense Message System (DMS) stimulation efforts. JITC has a long history of software systems development. The Joint Interoperability Evaluation System (JIES) was developed by ASTSD using Ada, X-WINDOWS. This test system is used extensively to conduct joint and combined interoperability certification of C^{4}I systems. Test Mission Systems in support of the DMS, EC/EDI, and GCCS have been developed using SQL-SERVER, Object Oriented Programming (VB and VISUAL C++) to test and certify these critical DISA systems for conformance and operational capability. Recent development efforts include Interactive Database WEB Application using Activex Data Objects (ADO).

STANDARDS AND REFERENCES

The Standards and References used are:

- ◆ DoD-STD-2168 Military Standard, Defense System Software Quality Program

- ◆ DoD Directive 8120.1 Life Cycle Management of Automated Information Systems (AIS)

- ◆ IEEE/EIA 12207.0
  Standard for Information Technology, 1997

SOFTWARE TESTING EXPERIENCE

The JITC has extensive experience testing software in the following areas:

- Global Command and Control System (GCCS)

- Defense Message System (DMS)

- Message Security Protocol (MSP), X.400/88 and X.500/88

- National Imagery Transmission Format Standard (NITFS)

- Tactical Digital Information Links (TADIL) A/B/J of C^{4}I Systems

- Electronic Key Management Systems (EKMS)

- Global Transportation Network (GTN)

- Scope Command High Frequency (HF) simulation

- Electronic Commerce/Electronic Data Interchange (EC/EDI)

- Year 2000 (Y2K) Compliance

SOFTWARE TESTING CAPABILITIES

- Independent Validation and Verification (IV&V)

- Design Reviews

- Component Level Testing

- Computer Software Configuration Items (CSCI) Testing

- Preparation of Test Plans, Procedures, Test Suites

- Software Quality Assurance

- Integrated Systems Acceptance Testing

- Software Regression Testing

- Operational Testing

- Interoperability Testing

- Functionality Testing

- Conformance Testing

- Performance Testing

- Security Testing

- Preparation of Formal Test Reports

- Stimulation, Simulation and Modeling